

CLAIMS

The embodiment of the invention in which an exclusive property or privilege is claimed is defined as follows:

- 1 1. A device to protect the neck and the base of the skull of a person, the
2 device comprising:
 - 3 a) a first impact-resistant pliable substrate whereby said substrate is adapted
4 to encircle an extended portion of the person's neck and lower cranium;
 - 5 b) straps extending from said substrate and comprising means allowing
6 closure of the straps around a ventral region of the neck.
- 1 2. The device as recited in claim 1 wherein the closure of the straps results
2 in the juxtaposition of a rigid planar substrate overlying the person's trachea, wherein
3 the planar substrate is attached to one of said straps.
- 1 3. The device as recited in claim 1 further comprising a second substrate
2 underlying the first substrate.
- 1 4. The device as recited in claim 1 further comprising a means for reversibly
2 attaching to a helmet.

1 5. The device as recited in claim 1 wherein the device is integrally molded to
2 a helmet.

1 6. The device as recited in claim 3 whereby the second substrate is adapted
2 to receive fluid.

1 7. The device as recited in claim 3 wherein the second substrate comprises
2 a plurality of reversibly deformable substrates.

1 8. The device as recited in claim 3 wherein the first substrate, the second
2 substrate, and the straps are radio-translucent.

1 9. The device as recited in claim 2 wherein the substrate is defined by an
2 arcuate outer shell overlaying a cushioning substrate.

1 10. The device as recited in claim 1 wherein reversibly deformable material
2 is integrally molded with said first substrate.

1 11. The device as recited in claim 3 including a means for regulating fluid
2 flow through the second substrate.

1 12. The device as recited in claim 3 wherein the first substrate and the
2 second substrate are integrally molded to each other.

1 13. The device as recited in claim 3 wherein the second substrate is adapted
2 to removably receive a hot-pack or a cold-pack.

1 14. The device as recited in claim 1 wherein said first substrate extends to a
2 region below the person's seventh vertebra.

1 15. The device as recited in claim 1 wherein the first substrate is adapted to
2 reversibly receive a hot-pack or a cold-pack.

1 16. A device for imparting physical protection and predetermined temperature
2 to the human neck, the device comprising:

- 3 a) a first substrate extending along the vertebra column of the region;
4 b) a second substrate integrally molded to the first substrate and extending
5 along lateral portions of the neck; and
6 c) a means for positioning cold packs or hot packs within the device so as to
7 effect the temperature of the neck.

1 17. The device as recited in claim 16 wherein the first substrate is more rigid
2 than the second substrate.

1 18. The device as recited in claim 16 wherein the positioning means is a
2 cavity defined by a portion of the second substrate, wherein the cavity is adapted to
3 receive the cold packs or hot packs.

1 19. The device as recited in claim 16 wherein the second substrate further
2 comprises a plurality of straps, each of said straps terminating with complementary
3 closure means and each of said straps having a length sufficient to encircle the front of
4 the neck so as to facilitate engagement the closure means.

1 20. The device as recited in claim 19 further comprising a third substrate
2 attached to one of said straps such that when the straps encircle the neck, the third
3 substrate directly overlays a tracheal region of the neck.